Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Notes Questions for the Unit 1, Part 4 Notes – Hardy Weinberg Equilibrium**

Mrs. Krouse, AP Biology, 2015-2016

***Vocabulary:*** *For each of the terms listed below, fill in the definition given in the notes in the second column. There may be two alternate definitions in the notes, so you can choose one or record both of them. In the third column, rewrite the definition of the term in your own words or find an alternate definition from another source. If you do find a definition from another source, please identify the source in parentheses below your definition. As crazy as this sounds, I’m okay with you using Wikipedia! In the fourth column, I may provide you with a memory trick and/or ask you to break down a term into its parts to better understand its meaning.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Vocabulary Term and Synonyms** | **Definition(s) Given in the Notes** | **Definition in Your Own Words or From Another Source** | **Memory Trick and / or** **Breaking down the Word** |
| Dominant Allele |  |  | **Breaking Down the Word:** How does “dominant” help clarify the meaning of this term? |
| Recessive Allele |  |  | **Breaking Down the Word:** Look up the meaning of “recess” How does this help clarify the meaning of the term? |
| Homozygous Dominant Genotype |  |  | **Breaking Down the Word:** “Homo” means “the same.” How does this help clarify the meaning of the term? |
| Homozygous Recessive Genotype |  |  | **Breaking Down the Word:** “Homo” means “the same.” How does this help clarify the meaning of the term? |
| Heterozygous Genotype |  |  | **Breaking Down the Word:** “Hetero” means “different.” How does this help clarify the meaning of the term? |
| Meiosis |  |  | N/A |
| Homologous Chromosomes |  |  | **Breaking Down the Word:** “Homo” means “the same.” How does this help clarify the meaning of the term? |
| Fertilization |  |  | N/A |
| Punnett Square |  |  | N/A |
| New Definition of Evolution |  |  | N/A |
| Genetic Drift |  |  | **Breaking Down the Word:** How does “drift” help clarify the meaning of this term? |
| Gene Pool |  |  |  |
| Bottleneck Effect |  |  |  |
| Founder Effect |  |  | **Breaking Down the Word:** Look up the meaning of “founder.” How does this help clarify the meaning of the term? |
| Gene Flow |  |  | **Breaking Down the Word:** How does “flow” help clarify the meaning of this term? |
| Hardy Weinberg Equilibrium |  |  | **Breaking Down the Word:** Look up the meaning of “equilibrium.” How does this help clarify the meaning of the term? |

***Practice Questions:*** *Answer the following questions thoroughly and accurately in complete sentences.*

1. How is the new definition of evolution similar to / different from the old definition of evolution given in the Part 1 Notes (Evolution Basics)?
2. What are the five factors that can cause the evolution of a population of organisms?
3. How does Hardy Weinberg equilibrium relate to evolution?
4. How do the five factors listed in Question #2 relate to Hardy Weinberg equilibrium?
5. How are the bottleneck effect and the founder effect similar to one another?
6. Describe how the bottleneck effect can result in the loss of an allele from a population’s gene pool.
7. Why does genetic drift have a more significant effect on the gene pools of small populations?